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SUBJECT: Bull Evaluation and Daughter Lists for Artificial-Insemination  
Organizations (February 1997)

TO: Sire Analysts, Artificial-Insemination Organizations

FROM: H.D. Norman, Research Leader, AIPL

*H. Duane Norman*

Enclosed are bull evaluation and daughter (BEAD) lists and an evaluation listing for your organization's bulls that had February 1997 USDA-DHIA genetic evaluations. To have a BEAD list released, artificial-insemination (AI) bulls coded as active or in limited use at the start of evaluation computations were required to have a birth date of January 1, 1986, or later; all other AI bulls (those coded as progeny test, semen collected, or inactive) were required to have a birth date of January 1, 1989, or later. For more details, see the enclosure "Explanation of Bull Evaluation and Daughter List." Bull-owner names and addresses were printed on the list if they were provided by the breed associations.

Economic values assigned to predicted transmitting abilities (PTA's) in the milk and fat dollars index (MF\$) and in the milk, fat, and protein dollars index (MFP\$) were based on a milk price of \$12.30 per hundredweight of milk with 3.5-percent fat and 3.2-percent protein and differentials of 8.0 cents for fat and 20.0 cents for protein. These values are a prediction of price relationships that will apply when cows from this year's matings are being milked. They are not expected to change until the base change in 2000. Thus,

$$\text{MF\$} = \$0.095 (\text{PTA milk}) + \$0.80 (\text{PTA fat})$$

$$\text{MFP\$} = \$0.031 (\text{PTA milk}) + \$0.80 (\text{PTA fat}) + \$2.00 (\text{PTA protein})$$

The cheese yield economic dollar index (CY\$) is calculated for Ayrshires, Brown Swiss, Holsteins, Milking Shorthorns, and Red and Whites by

$$\text{CY\$} = \$0.002218 (\text{PTA milk}) + \$1.9960 (\text{PTA fat}) + \$1.7299 (\text{PTA protein})$$

and for Guernseys and Jerseys by

$$\text{CY\$} = \$0.002218 (\text{PTA milk}) + \$0.80 (\text{PTA fat}) + \$3.1876 (\text{PTA protein})$$

The PTA's for component percentages were calculated with breed averages for cows born in 1990.

The net merit dollars index (NM\$) is based on MFP\$ discounted for feed cost as well as on PTA's for productive life (PL) and somatic cell score (SCS):

$$\text{NM\$} = .7 (\text{MFP\$}) + \$11.30 (\text{PTA PL}) - \$28.22 (\text{PTA SCS} - \text{breed average SCS})$$

Average first-lactation SCS for cows born in 1990 were:

Ayrshire	3.15	Holstein	3.20
Brown Swiss	3.22	Jersey	3.30
Guernsey	3.35	Milking Shorthorn	2.88

Enclosures